General

Title

Availability of services: the number of neurodevelopmental pediatricians or developmental-behavioral pediatricians who have provided any outpatient care to at least one enrolled child, per 1,000 enrolled children.

Source(s)

Quality Measurement, Evaluation, Testing, Review and Implementation Consortium (Q-METRIC). Basic measure information: access to outpatient child and adolescent psychiatrists, neurodevelopmental pediatricians, and developmental-behavioral pediatricians. Ann Arbor (MI): Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC); 2015 Sep. 45 p.

Measure Domain

Primary Measure Domain

Related Health Care Delivery Measures: Use of Services

Secondary Measure Domain

Related Health Care Delivery Measure: User-enrollee Health State

Brief Abstract

Description

This measure is used to assess the number of neurodevelopmental pediatricians or developmental-behavioral pediatricians who have provided any outpatient care to at least one enrolled child, per 1,000 enrolled children.

This rate will be expressed in terms of 1,000 eligible children (number of providers/1,000 enrolled children). The eligible population includes children younger than 18 years of age who have been enrolled in a Medicaid program or health plan that includes outpatient specialty care for at least one 90-day period (or 3 consecutive months) within the measurement year. Specialists are identified by specific taxonomy codes.

Rationale

Many children have conditions that would benefit from treatment provided by child and adolescent psychiatrists, neurodevelopmental pediatricians, and developmental-behavioral pediatricians. A 2009 review by the National Research Council and Institute of Medicine noted that 14% to 20% of young people experience a mental, emotional, or behavioral disorder at any given point in time and nearly 40% have experienced at least one psychiatric disorder by 16 years of age (Institute of Medicine [IOM], 2009). The number of children with disabilities related to mental and neurodevelopmental conditions has increased, even as disabilities related to physical causes in this age group have declined (Houtrow et al., 2014). Most pediatricians consider it appropriate to refer children with suspected developmental or behavioral problems for specialty care (Stein et al., 2008). However, difficulties with access to behavioral or developmental specialty care have been reported by both parents and primary care physicians (Krauss et al., 2003; U.S. Government Accountability Office [GAO], 2011; Steinman et al., 2012).

Evidence for Rationale

Houtrow AJ, Larson K, Olson LM, Newacheck PW, Halfon N. Changing trends of childhood disability, 2001-2011. Pediatrics. 2014 Sep;134(3):530-8. PubMed

Institute of Medicine (IOM). O'Connell ME, Boat T, Warner KE, editor(s). Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities. Washington (DC): National Academies Press; 2009 Mar 12.

Krauss MW, Gulley S, Sciegaj M, Wells N. Access to specialty medical care for children with mental retardation, autism, and other special health care needs. Ment Retard (N Y). 2003 Oct;41(5):329-39. PubMed

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Stein RE, Horwitz SM, Storfer-Isser A, Heneghan A, Olson L, Hoagwood KE. Do pediatricians think they are responsible for identification and management of child mental health problems? Results of the AAP periodic survey. Ambul Pediatr. 2008 Jan-Feb;8(1):11-7. PubMed

Steinman KJ, Kelleher KJ, Dembe A, Shoben A. Childrenâ€™s access to psychiatric care in Ohio: final report. Columbus (OH): Ohio Colleges of Medicine Government Resources Center; 2012 Oct 30. 57 p.

U.S. Government Accountability Office (GAO). Medicaid and CHIP: most physicians serve covered children but have difficulty referring them for specialty care. Washington (DC): U.S. Government Accountability Office (GAO); 2011 Jun. 62 p.

Primary Health Components

Access to specialty care; neurodevelopmental pediatricians; developmental-behavioral pediatricians; children; adolescents

Denominator Description

The eligible population for the denominator is the number of children younger than 18 years of age, who are enrolled in a Medicaid program or health plan that includes outpatient specialty care for at least one 90-day period (or 3 consecutive months) within the measurement year. This denominator is divided by 1,000 to calculate the rate per 1,000 enrolled children.

Numerator Description

The number of neurodevelopmental pediatricians or developmental-behavioral pediatricians who have provided any outpatient care to at least one enrolled child (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Prevalence of Mental, Developmental, and Behavioral Conditions among Children
Obtaining a general prevalence count for mental, developmental, and behavioral health conditions in children is not simple. Diagnoses may be difficult to determine at the population level, as patients may be seen in a variety of settings that are not billed in a uniform fashion, if at all. It is also common for individuals to have more than one disorder, making it necessary to estimate prevalence for both multiple and individual conditions. A 2009 review by the National Research Council and Institute of Medicine noted that 14% to 20% of young people experience a mental, emotional, or behavioral disorder at any given point in time, and nearly 40% have experienced at least one psychiatric disorder by the age of 16 years (Institute of Medicine [IOM], 2009).

Severity of Mental Health, Developmental, or Behavioral Conditions among Children
Mental health disorders can impose a heavy burden for children. These conditions may be associated with substance use, criminal behavior, and other risk-taking activities (Perou et al., 2013). Frequently, they are linked with additional mental health disorders and other medical conditions. Furthermore, mental health conditions beginning in childhood may continue into adulthood or even lead to suicide (Perou et al., 2013). The overall cost of mental health disorders for young adults has been estimated at $247 billion annually (Perou et al., 2013).

Similarly, developmental disorders cover a wide range of conditions that vary in both severity and prevalence. Recent estimates indicate that nearly 14% of children have some form of developmental disability (Boyle et al., 2011). Autism spectrum disorder is one of the more widely known developmental disorders, characterized by issues with social, emotional, and communication skills. Autism affects 1 out of every 68 children (Centers for Disease Control and Prevention [CDC], 2015). While autism can be successfully identified in the first 2 to 3 years of life, the disorder itself can last a lifetime and impede an individual's ability to live a normal life (Lord et al., 2006; Matson & Kozlowski, 2011). The toll exacted by developmental and behavioral disorders varies tremendously and may involve other medical conditions. These conditions can increase the risk of developing further behavioral and developmental disorders or other medical complications (Council on Children with Disabilities et al., 2006).

Performance Gap
Despite the prevalence of these disorders and conditions, treatment utilization lags far behind. Using the National Health and Nutrition Examination Survey (NHANES), Merikangas et al. (2010) found that only approximately half of respondents (aged 8 to 15 years old) with a mental disorder had used mental health services in the previous year. Utilization varied by disorder: approximately 48% of adolescents with ADHD used mental health services, while only 32% of those with generalized anxiety disorder did (Merikangas et al., 2010). In a second study, using the National Comorbidity Survey-Adolescent

Supplement, only an estimated 36% of adolescents (aged 13 to 18 years) with a mental health disorder had ever used mental health services (Merikangas et al., 2011). In the latter study, Hispanic and non-Hispanic black adolescents were less likely than white adolescents to receive services for mood and anxiety disorders, even in cases involving severe impairment (Merikangas et al., 2011).

Similar gaps in treatment have been seen for children with developmental disorders. Despite the importance of early treatment, waiting times in urban areas for pediatric autism evaluations were found to average 3 months, regardless of insurance type (Bisgaier et al., 2011). Others researchers have reported longer wait times for children with Medicaid to access a psychiatrist compared with access times for children with private insurance (Steinman et al., "Children's access," 2012). However, evidence is limited, and some approaches to quantify access require costly data collection methods that may be difficult to implement on a large scale (Steinman et al., "The use," 2012).

Within Medicaid, standards for quantifying access to developmental and behavioral specialty care, as well as to other types of specialty care, vary significantly by state, as do the types of providers measured and the methods of assessing compliance with state access standards (Office of Inspector General, 2014). These issues make it more difficult to compare access across states.

Refer to the original measure documentation for additional evidence supporting the measure.

Evidence for Additional Information Supporting Need for the Measure

Bisgaier J, Levinson D, Cutts DB, Rhodes KV. Access to autism evaluation appointments with developmental-behavioral and neurodevelopmental subspecialists. Arch Pediatr Adolesc Med. 2011 Jul;165(7):673-4. PubMed

Boyle CA, Boulet S, Schieve LA, Cohen RA, Blumberg SJ, Yeargin-Allsopp M, Visser S, Kogan MD. Trends in the prevalence of developmental disabilities in US children, 1997-2008. Pediatrics. 2011 Jun;127(6):1034-42. PubMed

Centers for Disease Control and Prevention (CDC). Autism spectrum disorder (ASD): facts about ASD. [internet]. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 2015 [accessed 2015 May 19].

Council on Children With Disabilities, Section on Developmental Behavioral Pediatrics, Bright Futures Steering Committee, Medical Home Initiatives for Children With Special Needs Project Advisory Committee. Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. Pediatrics. 2006 Jul;118(1):405-20. PubMed

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Lord C, Risi S, DiLavore PS, Shulman C, Thurm A, Pickles A. Autism from 2 to 9 years of age. Arch Gen Psychiatry. 2006 Jun;63(6):694-701. PubMed

Matson JL, Kozlowski AM. The increasing prevalence of autism spectrum disorders. Res Autism Spect Disord. 2011;5(1):418-25.

Merikangas KR, He JP, Brody D, Fisher PW, Bourdon K, Koretz DS. Prevalence and treatment of mental disorders among US children in the 2001-2004 NHANES. Pediatrics. 2010 Jan;125(1):75-81. PubMed

Merikangas KR, He JP, Burstein M, Swendsen J, Avenevoli S, Case B, Georgiades K, Heaton L, Swanson S, Olfson M. Service utilization for lifetime mental disorders in U.S. adolescents: results of the National

Comorbidity Survey-Adolescent Supplement (NCS-A). J Am Acad Child Adolesc Psychiatry. 2011 Jan;50(1):32-45. PubMed

Office of Inspector General. State standards for access to care in Medicaid managed care. Washington (DC): Department of Health and Human Services; 2014 Sep. 34 p.

Perou R, Bitsko RH, Blumberg SJ, Pastor P, Ghandour RM, Gfroerer JC, Hedden SL, Crosby AE, Visser SN, Schieve LA, Parks SE, Hall JE, Brody D, Simile CM, Thompson WW, Baio J, Avenevoli S, Kogan MD, Huang LN, Centers for Disease Control and Prevention (CDC). Mental health surveillance among children--United States, 2005-2011. Morb Mortal Wkly Rep Surveill Summ. 2013 May 17;62 Suppl 2:1-35. PubMed

Quality Measurement, Evaluation, Testing, Review and Implementation Consortium (Q-METRIC). Basic measure information: access to outpatient child and adolescent psychiatrists, neurodevelopmental pediatricians, and developmental-behavioral pediatricians. Ann Arbor (MI): Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC); 2015 Sep. 45 p.

Steinman KJ, Kelleher K, Dembe AE, Wickizer TM, Hemming T. The use of a "mystery shopper" methodology to evaluate children's access to psychiatric services. J Behav Health Serv Res. 2012 Jul;39(3):305-13. PubMed

Steinman KJ, Kelleher KJ, Dembe A, Shoben A. Childrenâ€™s access to psychiatric care in Ohio: final report. Columbus (OH): Ohio Colleges of Medicine Government Resources Center; 2012 Oct 30. 57 p.

Extent of Measure Testing

The Quality Measurement, Evaluation, Testing, Review and Implementation Consortium (Q-METRIC) used two methods to test the *reliability* of the measure: 1) Replication of the measure calculation process demonstrated excellent reliability, with some minor variance observed due to the dynamic nature of health administrative data. 2) Comparison of the taxonomy-based provider identification data sources showed very good reliability. *Validity* testing was performed to assess three aspects of the measure: 1) Testing to determine whether the identified specialists had specific certification and/or training in the respective areas showed very good validity in identifying child and adolescent psychiatrists and fair validity in identifying developmental-behavioral or neurodevelopmental pediatricians; this improved to good validity if child neurology was included in the assessment. 2) Testing to determine whether the content of care provided to Medicaid-enrolled children reflected the specialty areas showed excellent validity in the proportion of specialty-related care provided by identified child and adolescent psychiatrists and fair validity for developmental-behavioral or neurodevelopmental pediatricians. 3) Testing to determine whether the inclusion of alternate provider specialty data sources would affect specialist identification showed excellent validity in the proportion of specialty-related care provided by identified child and adolescent psychiatrists and fair validity for developmental-behavioral or neurodevelopmental pediatricians.

Refer to the original measure documentation for additional testing information.

Evidence for Extent of Measure Testing

Quality Measurement, Evaluation, Testing, Review and Implementation Consortium (Q-METRIC). Basic measure information: access to outpatient child and adolescent psychiatrists, neurodevelopmental pediatricians, and developmental-behavioral pediatricians. Ann Arbor (MI): Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC); 2015 Sep. 45 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Hospital Outpatient

Managed Care Plans

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Age less than 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Priority

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

Data Collection for the Measure

Case Finding Period

The measurement year

Denominator Sampling Frame

Enrollees or beneficiaries

Denominator (Index) Event or Characteristic

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
The eligible population for the denominator is the number of children younger than 18 years of age, who are enrolled in a Medicaid program or health plan that includes outpatient specialty care for at least one 90-day period (or 3 consecutive months) within the measurement year. This denominator is divided by 1,000 to calculate the rate per 1,000 enrolled children.

Exclusions
None

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

The number of neurodevelopmental pediatricians or developmental-behavioral pediatricians who have provided any outpatient care to at least one enrolled child

Note:

> These specialist physicians are identified using taxonomy codes (refer to Table 1 in the original measure documentation for taxonomy codes by specialty) linked to a National Provider Identifier (NPI) with the National Plan & Provider Enumeration System (NPPES) registry. Only individual physicians are included as eligible providers.
> For this measure, outpatient care is defined as any visit within the measurement year to a facility with a Place of Service code listed in Table 2 of the original measure documentation.

Exclusions

> NPIs representing organizations and clinics
> NPIs representing professionals who are not physicians (e.g., nurse practitioners and physician assistants)

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Type of Health State

Proxy for Health State

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Does not apply to this measure (i.e., there is no pre-defined preference for the measure score)

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Access to outpatient neurodevelopmental pediatricians and developmental-behavioral pediatricians.

Measure Collection Name

Availability of Specialty Services Measures

Submitter

Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC) - Academic Affiliated Research Institute

Developer

Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC) - Academic Affiliated Research Institute

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Composition of the Group that Developed the Measure

Availability of Specialty Services Expert Panel

Representative/Feasibility Panel

George Baker, MD, Retired, Co-Director, Office of Medical Affairs for Michigan Medicaid, Medical Director of Michigan's Title V program for Children and Youth with Special Health Care Needs, Michigan Department of Community Health, Lansing, MI
Laura-Mae Baldwin, MD, MPH, Director of Research and Professor, Department of Family Medicine, University of Washington, Seattle, WA
Patricia Barrett, MHSA, Vice President for Product Development, National Committee for Quality Assurance, Washington, DC
Angie Davis, MA, Parent Representative, DeWitt, MI Lisa Huckleberry, Parent Representative, DeWitt, MI
Renee Jenkins, MD, FAAP, Professor, Department of Pediatrics and Child Health, Howard University College of Medicine, Washington, DC
David Kelley, MD, MPA, Chief Medical Officer, Office of Medical Assistance Programs, Pennsylvania Department of Public Welfare, Harrisburg, PA
Maureen Milligan, PhD, MPA, MA, Director, Texas Institute of Health Care Quality and Efficiency,

Texas Health and Human Services Commission, Austin, TX
Sue Moran, BSN, MPH, Director of the Bureau of Medicaid Program Operations and Quality Assurance, Michigan Department of Community Health, Lansing, MI
R. Gary Rozier, DDS, MPH, Director and Professor, Dental Public Health and Residency Training Program, Department of Health Policy and Management, University of North Carolina at Chapel Hill, Chapel Hill, NC
Aradhana (Bela) Sood, MD, MSHA, FAACAP, Professor and Chair, Division of Child and Adolescent Psychiatry, Medical Director, Virginia Treatment Center for Children, Virginia Commonwealth University, Richmond, VA
Mark Wietecha, MS, MBA, President and CEO, Children's Hospital Association, Alexandria, VA

Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC) Investigators

Sarah J. Clark, MPH, Associate Research Scientist, Department of Pediatrics, School of Medicine, University of Michigan, Ann Arbor, MI
Meredith P. Riebschleger, MD, MS, Clinical Lecturer, Department of Pediatrics and Communicable Diseases, Pediatric Rheumatology, School of Medicine, University of Michigan, Ann Arbor, MI
Gary L. Freed, MD, MPH, Professor of Pediatrics, School of Medicine and Professor of Health Management and Policy, School of Public Health, University of Michigan, Ann Arbor, MI (principal investigator)
Kevin J. Dombkowski, DrPH, MS, Research Associate Professor of Pediatrics, School of Medicine, University of Michigan, Ann Arbor, MI

Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Sep

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

Measure Availability

Source available from the Quality Measurement, Evaluation, Testing, Review, and Implementation

Consortium (Q-METRIC) Web site . Support documents are also available.

For more information, contact Q-METRIC at 300 North Ingalls Street, Room 6C08, SPC 5456, Ann Arbor, MI 48109-5456; Phone: 734-232-0657; Fax: 734-764-2599.

NQMC Status

This NQMC summary was completed by ECRI Institute on January 11, 2016. The information was verified by the measure developer on March 2, 2016.

Copyright Statement

Production

Source(s)

Quality Measurement, Evaluation, Testing, Review and Implementation Consortium (Q-METRIC). Basic measure information: access to outpatient child and adolescent psychiatrists, neurodevelopmental pediatricians, and developmental-behavioral pediatricians. Ann Arbor (MI): Quality Measurement, Evaluation, Testing, Review, and Implementation Consortium (Q-METRIC); 2015 Sep. 45 p.

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